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Frederick STERN | Zhaoyuan WANG | Jianming YANG | Hamid SADAT-HOSSEINI | Maysam MOUSAVIDARAD | Shantí BHUSHAN | Matteo DIEZ | Sung-Hwan YOON | Ping-Chen WU | Seong Mo YEON | Timur DOGAN | Dong-Hwan Kim | Silvia VOLPI | Michael CONGER | Thad MICHAEL | Tao XING | Robert S. THODAL | Joachim L. GRENESTEDT

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Due to the energy crisis and the environmental issues like pollution and global warming, the exploration for renewable and clean energies becomes crucial. The offshore floating wind turbines (OFWTs)...

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Chao WANG | Sha-sha ZHENG | Pei-fang WANG | Jun HOU

The vegetation, as one of the most important components, plays a key role in the aquatic environment. This paper reviews recent progress on the complex interaction between the vegetation and the water...

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Chao WANG | Sha-sha ZHENG | Pei-fang WANG | Jin QIAN

This paper reviews the removal of contaminants including nutrients, metals and organic pollutants by vegetations in aquatic environments. The removal efficiencies are considered with respect to 16,...

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[Article 1]
Sang-Gyun KIM | Kye-Bock LEE | Kyung-Yup KIM
Water hammer following the tripping of pumps can lead to overpressure and negative pressure. Reduction in overpressure and negative pressure may be necessary to avoid failure, to improve the efficiency...

[Article 2]
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October 2008
Zu-jiang LUO | Ying-ying ZHANG | Yong-xia WU
For deep foundation pit dewatering in the Yangtze River Delta, it is easy to make a dramatic decrease of the underground water level surrounding the dewatering area and cause land subsidence and geologic...

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The pile-soil interaction under wave loads is an extremely complex and difficult issue in engineering. In this study, a physical model test is designed based on the principle of the gravity similarity...

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[Article 6]
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Chi YANG | Fuxin HUANG | Hyunyul KIM
A new methodology for hydrodynamic optimization of a TriSWACH is developed, which considers not only the positions of the side hulls but also the shape of the side hulls. In order to account for the...

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Ya-yun WANG | Wen-rong HU | Shi-dong ZHANG

It is shown that the leading edge protuberances on the flippers of a humpback whale can significantly improve the hydrodynamic performance. The present study numerically investigates the flow control...

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Qian-xi WANG | Yuan-xiang YANG | Danielle Sweimann TAN | Jian SU | Soon Keat TAN

Bubble dynamics are associated with wide and important applications in cavitation erosion in many industrial systems, medical ultrasonics and underwater explosions. Two recent developments to this classical...

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Xiao-jun LÜ | Qi-dou ZHOU | Bin FANG

A type of distributed pump-jet propulsion system (DPJP) is developed with two or four specially designed pump-jet pods located around the axisymmetric underwater vehicle body symmetrically. The flow...

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Ji-feng WANG | Janusz PIECHNA | Norbert MÜLLER

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Ji PEI | Shou-qi YUAN | Xiao-jun LI | Jian-ping YUAN

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Xing-xian CHEN | Zu-jiang LUO | Shi-ling ZHOU

In order to study the influences of hydraulic and mechanical parameters on land subsidence and ground fissure caused by groundwater exploitation, based on the Biot's consolidation theory and combined...

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Yu-cun PAN | Qi-dou ZHOU | Huai-xin ZHANG

The numerical method is used for predicting the rotary-based hydrodynamic coefficients of a submarine. Unsteady RANS simulations are carried out to numerically simulate the rotating arm test performed...

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Zhuo XU | Wei ZHANG | Pei-dong LU | Xiang AN | Ke-feng CHEN

Very limited modeling studies were available of the wave-induced current under the complex hydrodynamic conditions in the South Yellow Sea Radial Sand Ridge area (SYSRSR). Partly it is due to the difficulties...

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Andrew CORNETT | Mark HECIMOVICH | Ioan NISTOR

This paper provides new guidance concerning the hydrodynamic loads on submerged intake structures located in shallow water under breaking and non-breaking waves. Results from a series of experiments...

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December 2012
John S. ANAGNOSTOPOULOS | Dimitris E. PAPANTONIS

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October 2014
Xing-qi LUO | Guo-jun ZHU | Jian-jun FENG

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Guan-min ZHANG | Xue-li LENG | Nai-xiang ZHOU | Yan-ping SHI | Li-min LI

This paper studies the flow and heat transfer characteristics around a new type of egg-shaped tubes made up of a semicircle upstream and a semi-ellipse downstream, numerically and experimentally, for...
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Jie DONG | Ben-long WANG | Hua LIU

The evolution and run-up of double solitary waves on a plane beach were studied numerically using the nonlinear shallow water equations (NSWEs) and the Godunov scheme. The numerical model was validated...